

Breaking the Logistics Branch Paradigm: Should the U.S. Army Combine the Current Logistics Officer Branches of Ordnance, Quartermaster, Transportation, and Medical Service into One Branch?

**A Monograph
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ABSTRACT

BREAKING THE LOGISTICS BRANCH PARADIGM by MAJ David C. Dusterhoff, USA, 49 pages.

As the United States Army transforms into a strategically responsive, lighter force, it will have the capability to conduct full spectrum operations anywhere in the world. Its highly lethal, deployable, and mobile units will be prepared for any challenge they might face on the future battlefield, known as the Contemporary Operating Environment. Combat Service Support (CSS) organizations are responsible for sustaining the combat forces as they meet these future challenges. Logistics officers will need to plan, manage, and direct the execution of CSS functions for the force commander. In order for future operations to be successful, the functions of maintenance, supply, transportation, combat health support, and field services must be well integrated and synchronized to reduce the logistics footprint without sacrificing combat power. This incredibly demanding set of requirements calls for talented logisticians who have had formal multifunctional training from the time they enter the military.

This monograph asks if the U.S. Army should combine the current logistics officer branches from the Ordnance, Quartermaster, Transportation, and Medical Service Corps, into one branch. Currently, officers in the existing logistics branches, and those MSC officers who volunteer to become multifunctional logisticians, do not formally receive multifunctional training until the third phase of the Combined Logistics Captains Career Course (CLC3). This monograph examines how these officers are trained today, what their responsibilities are in supporting current CSS doctrine, and what their roles will be in participating in future operations. The author is able to draw conclusions and make logical recommendations in researching these three areas by applying the following criteria: Officer versatility, support of current doctrine, support of future operations, and simplicity in training and assignments.

This monograph concludes that the U.S. Army should combine the Ordnance, Quartermaster, and Transportation officer branches, along with the MSC officer specialties of Health Services Operations (67A77) and Health Services Materiel (67A78) into a single logistics officer branch. The new branch would be called the Combat Logistician Branch. By training these officers together as multifunctional logisticians from the time they enter the Army, they will be better prepared to meet future CSS challenges and to support the Army's transformation. The author recommends that the Army start a Combined Logistics Officer Basic Course (CLOBC) to produce Combat Logistician lieutenants who can successfully lead platoons and work as staff officers in multifunctional CSS battalions. Additionally, CLC3 should be reduced from four phases to three phases, which would decrease the total course length by four weeks. The first phase would last five weeks and concentrate on leadership, communication, and company level operations; the second phase would last nine weeks and focus on CSS doctrine and multifunctional logistics; and the third phase would last six weeks and continue to be the integrated staff officer training program (formerly CAS3) at Fort Leavenworth, Kansas. This would give officers more multifunctional training, and be less disruptive since the students would no longer have to go TDY twice during the course. Finally, the author recommends that Paragraph 12-7 of Field Manual 3-0 *Operations* be rewritten to reflect the following five CSS functions: maintenance, supply, transportation, combat health support, and field services. The other eight CSS functions listed in FM 3-0 should be called "administrative" or "special" functions.

TABLE OF CONTENTS

TABLE OF CONTENTS	1
CHAPTER ONE	1
INTRODUCTION	1
CHAPTER TWO	5
LOGISTICS OFFICER TRAINING AND SKILLS	5
ORDNANCE CORPS	7
QUARTERMASTER CORPS	10
TRANSPORTATION CORPS	14
MEDICAL SERVICE CORPS	18
CHAPTER THREE	22
CURRENT CSS DOCTRINE	22
CSS CHARACTERISTICS	22
CSS FUNCTIONS	28
CSS EXECUTION	29
CSS ORGANIZATIONS	31
CHAPTER FOUR	33
FUTURE CSS OPERATIONS	33
INTERIM BRIGADE COMBAT TEAM	34
INTERIM DIVISION	37
OBJECTIVE FORCE	38
CHAPTER FIVE	40
CONCLUSION AND RECOMMENDATIONS	40
BIBLIOGRAPHY	47

CHAPTER ONE

INTRODUCTION

Sun Tzu said, “If it [the army] does not have provisions it will be lost”.¹ Although written thousands of years ago, this simple statement applies more than ever to military operations today. The individuals that ensure that armies have provisions are logisticians. In addition to supplying the army with provisions, logisticians must be able to perform other combat service support (CSS) functions throughout the world at every level of war. A logistics officer must therefore be versatile and knowledgeable in all areas of CSS to meet the harsh demands and difficult requirements that our army faces today.

The United States Army currently has four separate logistics branches for officers. Officers in the Ordnance, Quartermaster, and Transportation Corps and selected Medical Service Corps officers share the common bond of being logisticians. Newly appointed lieutenants receive training specific to the branch in which they are assigned at their Officer Basic Courses (OBCs) before going to their first permanent duty stations. When they arrive at their first assignments, the “fortunate” officers will lead platoons that perform missions directly related to the branch training that they received in OBC. These officers may even be lucky enough to remain platoon leaders for at least a year before they take staff positions at headquarters above the company level. However, quite often a new lieutenant is assigned to a battalion or brigade staff position first, usually to fill a vacant captain’s position, while waiting his turn for a platoon leader position. Although commanders and personnel officers realize the importance of getting the new lieutenant troop time, this is often a problem that they just can’t avoid. Another possibility is that the lieutenant may have to take charge of a platoon outside his own branch. For instance, it is not uncommon to see Quartermaster officers holding Ordnance platoon leader positions or Ordnance

¹ Ralph D. Sawyer, *Sun Tzu: The Art of War* (Boulder: Westview Press, 1994), 197.

officers holding Transportation platoon leader positions. Currently, the 507th Corps Support Group (CSG) at Fort Bragg, North Carolina, for example, has three of its forty-five lieutenants leading platoons outside their branch.²

In each of these challenging cases, the new lieutenant has to quickly adapt to a situation for which he is not formally trained. If the officer is assigned to a staff position, which will normally be in a multifunctional type command, the officer will have to gain knowledge specific to all the units within the organization to properly support those units. In the case of a platoon leader in charge of a platoon performing missions in areas in which he wasn't trained, the officer will rely on on-the-job training to become familiar with the platoon's mission. Officers offered this situation will not normally pass up the opportunity to lead troops, even though they usually do not understand the logic of leading a platoon from another branch.

Following promotion to Captain, the logistics officer will finally get his first formal multifunctional logistics training at the Combined Logistics Captain's Career Course (CLC3) at Fort Lee, Virginia, formerly called the Combined Logistics Advanced Course (CLOAC). This training lasts approximately twenty-four weeks, and is divided into four specific phases. The first phase lasts a little over six weeks, and consists of a common core curriculum that trains officers in a variety of areas such as organizational supply, organizational maintenance, leadership, writing, history, etc. During the second phase, the officers attend branch specific training for five weeks at their respective branch schools: Ordnance officers go to Aberdeen Proving Grounds, Maryland; Quartermaster officers stay at Fort Lee; Transportation officers go to Fort Eustis, Virginia; and Medical Service officers go to Fort Sam Houston, Texas. For the third phase, all the officers return to Fort Lee for about seven weeks of true multifunctional logistics instruction. It is during this important phase that the officers begin to doctrinally learn what their counterparts in the other three logistics branches do through practical exercises, briefings, and interaction with

² 507th CSG Officer Backfill Sheet from MAJ Rafael Boyd, S1 as of 5 April 2002.

instructors and each other. The final phase is the Combined Arms and Services Staff School (CAS3) at Fort Leavenworth, Kansas where officers from all branches of the Army come together and train to improve their staff officer skills.

At about the fifth or sixth year of service, each officer gets to choose a functional area. Most officers from the logistics branches will choose, and be designated as Functional Area (FA) 90s – Multifunctional Logisticians. This is encouraged since it presents CSS officers with more opportunities later in their careers (i.e. more branch qualifying command and staff opportunities at all levels). However, there is no training that goes along with the FA 90 designation – other than what the officers received in the third phase of CLC3. Instead, the designation simply shows up on the officers' Officer Record Briefs (ORBs). Similarly, as was the case with the platoon leaders, it is not uncommon to see logistics officers commanding companies outside their own branches. Two of the twenty company commanders in the 507th CSG at Fort Bragg currently command companies outside their own branches.³

By the time the logistics officer is promoted to the rank of Major, there are very few Table of Organization and Equipment (TO&E) slots that are branch specific. Therefore, the logistics officer, regardless of branch, will be expected to be knowledgeable in all areas of logistics. Furthermore, if the officer attends the Command and General Staff Officers Course (CGSOC) as a resident, it is very likely that the officer will be the only logistician within a staff group of sixteen to eighteen officers. Once again, he will be expected to be well-versed in all areas of logistics.

Depending on an officer's experience and assignments, this may pose a serious problem. The so called "resident expert" will most likely not have a firm grasp on all areas of CSS and will only have had the seven weeks of formal training at Fort Lee to fall back on. Should the Army combine the logistics officer branches of Ordnance, Quartermaster, Transportation, and Medical

³507th CSG Officer Backfill Sheet from MAJ Rafael Boyd, S1 as of 5 April 2002.

Service (Operations and Materiel specialties only) into one branch? If the Army did break the current logistics branch paradigm, then the stated problem could be solved. Logistics officers would be more versatile because they would receive formal training in all areas of CSS from the time they enter OBC. Furthermore, there would no longer be separate logistics branches, and logistics officers would no longer have to be concerned about taking positions outside their own branch. All logistics positions would call for “Combat Logisticians” for example, vice a functional officer, and that is exactly what all the logisticians waiting for assignments would be.

This monograph only focuses on the four officer branches mentioned and does not include aviation logistics officers since they are unique due their highly specialized training (i.e. they are pilots). Similarly, this monograph does not include Explosive Ordnance Disposal (EOD) officers due to their very unique training.

Chapter Two of this monograph explains how each of the logistics branches train their lieutenants and captains; what unique skills each type of officer has; what each of the officer Areas of Concentration (AOC) are by branch; and what similarities and differences exist among the branches. Chapter Three covers current CSS doctrine and what is required of logistics officers in executing their duties to support all types of operations across the full spectrum of conflict. Chapter Four discusses the challenges that logistics officers will face in supporting the Interim Brigade Combat Team (IBCT), the Interim Division (IDIV), and the Objective Force. Finally, the last chapter of this monograph presents conclusions and recommendations as to whether or not the Army should institute the new Combat Logistician Branch. The recommendations are based on the following criteria used throughout each chapter: Officer versatility, support of current doctrine, support of future operations, and simplicity in training and assignments.

CHAPTER TWO

LOGISTICS OFFICER TRAINING AND SKILLS

Currently, each of the logistics branches train their new lieutenants separately at the Army installations mentioned in Chapter One of this monograph. Although the lengths of the OBCs vary slightly, the officers receive much of the same type of training. For example, all branches, including the combat arms and combat service branches, have to focus on preparing their officers for duty at the company level by emphasizing basic leadership, problem-solving, and communication skills.

Department of the Army Pamphlet 600-3, *Commissioned Officer Development and Career Management* lists several characteristics that each of the branches requires its officers to display. Officers in every branch must be skilled in basic leadership and they must be able to apply the four core dimensions of leadership: values, attributes, skills, and actions. These leadership dimensions are clearly outlined in Field Manual 22-100, *Army Leadership* and are common requirements that apply to officers in every branch of the Army. Each branch recognizes that it is important for their officers to portray the seven Army values; to possess positive mental, physical, and emotional attributes; to develop strong interpersonal, conceptual, technical, and tactical skills; and to be able to influence, operate, and improve through their actions. Each branch trains their new officers using this leadership framework.

These important requirements have driven the Officer Education System (OES) to pilot a new seven week Basic Officer Leaders Course (BOLC) at Fort Benning, Georgia to develop leaders who are more competent and confident in their duties. Lieutenants from every branch attend this course prior to attending their branch specific training at the different OBCs. Their instruction is focused on ensuring that the new officers are skilled in leading and training subordinates, and in maintaining equipment. The first two BOLC pilots have already been completed and the Army

expects to fully implement the program by FY 03.⁴ By formally training and educating combat arms officers, combat service officers, and combat service support officers together, the Army is producing well-rounded, effective leaders who are better prepared to work with others outside their own branch throughout their careers.

In 1994, the logistics community recognized the need to incorporate a similar program for newly promoted CSS captains. The twenty-week, three-phased program was called the Combined Logistics Officer Advanced Course (CLOAC). In October 1998, the Combined Logistics Captains Career Course (CLC3) replaced CLOAC by adding a fourth phase, and bringing the total course length up to twenty-four weeks. Based on the recommendation of the Captains Professional Military Education (CPT PME) Study, CLC3 combined CLOAC and CAS3 into one course for logistics officers.⁵ The study recognized that captains need to be educated in how to be a staff officer soon after promotion to Captain, since they would more than likely hold staff positions before taking command of companies. Similarly, the officer education system replaced all other branch officer advanced courses with captains career courses and incorporated the CAS3 curriculum. Officers attend this final six-week phase at Fort Leavenworth, Kansas.

Currently all Ordnance, Quartermaster, and Transportation officers attend CLC3. Medical Service Corps officers who are in specialties related to medical operations or medical logistics are able to attend on a volunteer basis. On average, twelve Medical Service Corps officers attend CLC3 each year.⁶

⁴ BG Mitchell Stevenson, "Ordnance Update From Chief of Ordnance," PowerPoint Briefing, Slide 9, 10 May 2001.

⁵ "Captains Career Course," Internet, <http://www.almc.army.mil/sls/career.htm>, accessed 5 March 2002.

⁶ "Medical Service Corps: Annual Report 2001," Internet, <http://www.perscom.army.mil/Opmsc/1brchief.htm>, accessed 5 March 2002.

The first phase of CLC3 concentrates on a core curriculum that stresses leadership, communications, organizational supply, organizational maintenance, unit training, and unit status reporting. These important areas have always been common education for all logistics officers, and it therefore makes reasonable sense to train the officers together. This phase also includes a staff ride, a tactics map exercise, the Military Decision Making Process (MDMP), and a deployment exercise. For the second phase, the officers go to their branch schools for five weeks to get training in areas specific to their own branches. This phase, as it pertains to each branch, will be discussed later in this chapter. The third phase of CLC3 brings the officers back together at Fort Lee for eight weeks of multifunctional logistics training. Students learn how to apply current CSS doctrine through practical exercises, briefings, and interacting with other logisticians- some of whom are from other countries. Some of the key subjects are Sustain the Soldier, Move the Force, Fuel the Force, Arm the Force, and Fix the Force.

In addition to the skills and training that are common to all logisticians, each type of officer acquires unique skills at OBC and during the second phase of CLC3. This monograph will now examine each of the branches separately to indicate not only the differences, but also any similarities among the CSS branches.

ORDNANCE CORPS

The Ordnance Corps branch provides combat power to the United States Army by supporting the development, production, acquisition, and sustainment of weapon systems, ammunition, missiles, electronics, and ground mobility systems during peace and war.⁷ Additionally, the Ordnance Corps is responsible for testing, fielding, maintaining, and disposing of Army materiel.

Ordnance officers, like all officers, must be technically and tactically proficient. Ordnance officers must be familiar, however, with the equipment, systems, tools, personnel, and units

⁷ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 149.

specific to the Ordnance branch. They must also be knowledgeable about Ordnance doctrine in particular, and logistics doctrine in general. They become knowledgeable and skilled through continuous operational assignments, self-development, study, training, and education.

Ordnance lieutenants begin their training and education at the Ordnance Officer Basic Course at Aberdeen Proving Grounds, Maryland. The purpose of the course is to prepare newly commissioned Ordnance lieutenants to be platoon leaders, maintenance control officers, and munitions operations officers in divisional and non-divisional units, and to provide them the necessary skills to successfully perform their assigned duties.⁸ The course lasts eighteen weeks and focuses on written communications, oral communications, leadership, working in small groups, and research ability. The school assesses students' writing requirements and research ability through the completion of a book review, a battle analysis paper, a counseling statement, a report of survey, a letter of introduction, a standing operating procedure, a memorandum, an Army values paper, and an essay. The students display their oral communications skills through a book brief, a Gettysburg brief, "DS FIX" (a simulated exercise) brief, and a tactical officer (TAC) assessment. The school also evaluates the students in leadership and their contribution to group work using the Basic Officers Leaders Tasks (BOLT) model. This includes an FTX, land navigation, rifle marksmanship, the Army Physical Fitness Test (APFT), the DS-FIX exercise, an ammunition logistical exercise (LOGEX), and TAC evaluation. Throughout the course, the lieutenants will study and take exams on areas like armament, fire control, recovery operations, metal working, materiel handling equipment (MHE), hydraulics, small arms, and tracked vehicles. These exams are multiple choice and some of them are open book. The training is designed to expand the officers' general knowledge of Ordnance principles and procedures, not to make them experts in specific areas of maintenance or munitions.

Ordnance officers get their next formal Ordnance training during the second phase of CLC3.

⁸ "Ordnance OBC," Internet, <http://www.goordnance.apg.army.mil/CSD%20Web/Training-OBC.htm>, accessed 14 March 2002.

The newly promoted captains get five weeks to expand their knowledge of maintenance management, ground and missile equipment, and maintenance organizations. Specifically, the course prepares company grade Ordnance officers to command maintenance companies and serve as multifunctional staff officers at the battalion and brigade level.⁹ The students study maintenance doctrine to better understand missions, key personnel, capabilities, organizations, Standard Army Management Information Systems (STAMISs), and locations of the units conducting different levels of maintenance operations on the battlefield. They also learn about specific areas of maintenance management such as direct support (DS), general support (GS), and depot level maintenance operations; job order flow; and the Standard Army Maintenance System (SAMS) – versions one and two, and how to read the SAMS reports. Finally, the course covers supply operations and management to give students a better understanding of retail supply operations, the Unit Level Logistics System (ULLS), the Standard Army Retail Supply System-Objective (SARRS-O), and Class IX management. Just as in OBC, the goal is for Ordnance officers to expand their general knowledge, rather than to become experts in everything there is to know about the Ordnance branch.

Throughout their careers, however, Ordnance officers will, if given the right assignments, become especially knowledgeable of the skills pertaining to their designated AOC. They may be placed in one of the three following AOCs: Materiel Maintenance Management (AOC 91B), Materiel Munitions Management (AOC 91D), or Explosive Ordnance Disposal (AOC 91E). But since it is possible for Ordnance officers to work outside their own AOCs, they may have to become technically and tactically competent in other AOCs, both within and outside the Ordnance branch.¹⁰

⁹ “Combined Logistics Captains Career Course,” Internet, <http://www.goordnance.apg.army.mil/CSD%20Web/Training-CLC.htm>, accessed on 14 March 2002.

¹⁰ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 149.

MATERIEL MAINTENANCE MANAGEMENT (AOC 91B)

Officers in this AOC are responsible for supervising and directing a wide variety of maintenance functions including repair, replacement, overhaul, fabrication, inspection, test and diagnostic, calibration, machining, metal working, and welding. They are responsible for integrating the maintenance and repair parts supply for Army conventional weapon systems and their associated ground support equipment, wheeled and track vehicles, communications and electronic equipment, power generation equipment, engineer equipment, and quartermaster equipment. The primary concern of these officers is to ensure that the maximum number of weapon systems are mission ready and available to the combat commanders.¹¹ This means that officers in this AOC must be competent and knowledgeable in maintenance management and in multifunctional logistics operations to ensure that their customers are supported in an effective and timely manner.

MATERIEL MUNITIONS MANAGEMENT (AOC 91D)

Officers in this AOC are experts in managing and directing activities and units that support conventional munitions. They acquire skills in supplying, storing, maintaining, transporting, handling, inspecting, and securing the Army's highly sophisticated munitions inventory. These officers must be technically and tactically proficient in both munitions management and multifunctional logistics operations to ensure that combat commanders have the right munitions, in the right quantity, at the right time and place on the battlefield.

QUARTERMASTER CORPS

The Quartermaster Corps branch provides supply support, field service support, aerial delivery support, and materiel and distribution management support to sustain the United States

¹¹ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 149.

Army's forces in peace and in war.¹² Quartermaster officers must be able to perform many tasks and functions at all levels of command throughout their careers. Some of these functions include the acquisition, receipt, storage, distribution, and issue of the following commodities: Major end items (Class VII), repair parts (Class IX), subsistence (Class I), water, petroleum products (Class III), construction materiel (Class IV), maps, and other general supplies - not including ammunition (Class V), cryptographic materiel, or medical supplies (Class VIII). Additionally, they are responsible for storing, maintaining, repairing, distributing, and disposing of air items; packing parachutes; sling load operations; and aerial delivery operations. They also provide service support functions in the areas of laundry and bath, mortuary affairs, dining facility operations, and Army and Air Force Exchange (AAFES) operations.

As is the case with their Ordnance counterparts, they become knowledgeable and skilled in these areas through continuous operational assignments, self-development, study, training, and education. The Quartermaster Officer Basic Course at Fort Lee, Virginia prepares commissioned Quartermaster lieutenants to function as platoon leaders capable of performing common soldier skills, and entry level technical tasks in petroleum and water operations, subsistence management, general materiel management, and field services.¹³ The course lasts fourteen weeks and is conducted in five academic phases: The Core Phase; the Leadership Phase; the Supply and Service Phase; the Subsistence Phase; and the Petroleum, oils, and Lubricants (POL)/Water Phase. During the Core Phase, students learn communication skills, company administration, training management, unit supply procedures, unit maintenance operations, Army operations, military law, and tactics. The Leadership Phase consists of several performance-oriented events like the "Logistics Warrior" three-day, multi-echelon field training exercise (FTX) and the Leadership Experience and Development (LEAD) program. Both of these events are

¹² Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 157.

¹³ "QMOBC Course Description," Internet, <http://www.quartermaster.army.mil/ltd/obc/sect11.html>, accessed 14 March 2002.

designed to give the lieutenants the opportunity to lead platoons in a hands-on environment. During the Supply and Service Phase, students learn about mortuary affairs, supply support activities (SSAs), airdrop operations, laundry and bath operations, SARSS-O, and tactical logistics operations. The Subsistence Phase covers dining facility management, army field feeding operations and subsistence supply operations. The POL/Water Phase features general POL subjects, POL equipment, and water supply operations.

At CLC3, the Quartermaster captains remain at Fort Lee for their five-week, branch specific training with the goal of becoming technically proficient Quartermaster officers who are prepared to command functional Quartermaster companies.¹⁴ Students participate in practical exercises using SARSS, ULLS, and the Standard Property Book System (SPBS). They also participate in the “Logistics Warrior” FTX as mentors to the OBC lieutenants, and in an Operations Other Than War (OOTW) exercise, which is good preparation for the third (multifunctional) phase of CLC3. Additionally, the students receive overviews of sling load operations and liquid logistics (POL and Water).

In order to provide such a wide variety of supplies and services for combat forces, the Quartermaster Corps branch designates its officers into three different AOCs and one skill identifier (SI): Quartermaster, Supply, and Materiel Management (AOC 92A); Aerial Delivery and Materiel (AOC 92D); Petroleum and Water (AOC 92F), and Mortuary Affairs (SI 4V).

QUARTERMASTER, SUPPLY, AND MATERIEL MANAGEMENT (AOC 92A)

Officers in this AOC command, direct, and manage units and soldiers involved in the production, acquisition, receipt, storage, issue and distribution of equipment, repair parts, fortifications and construction materiel, and general supplies.¹⁵ These officers become skilled in

¹⁴ “Combined Logistics Captains Career Course,” Internet, <http://www.quartermaster.army.mil/ltd/pdd.html>, accessed 14 March 2002.

¹⁵ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 158.

property accountability and property management due to their career experiences beginning from when they are company grade officers. As lieutenants, for example, some Quartermaster lieutenants will have the opportunity to be accountable officers at supply support activities (SSAs) where they will be responsible for millions of dollars worth of repair parts, or general supplies. Officers designated as 92As will also be exceptionally knowledgeable in multifunctional logistics operations since supply operations are closely linked to the other CSS functions. For instance, repair parts are a class of supply, but they are very important to uninterrupted maintenance operations on the battlefield. Also, transportation operations are always linked to the function of supply since supplies must be distributed all over the world. Quartermaster Materiel Management officers must fully understand these interrelationships and the multifunctional nature of their positions.

AERIAL DELIVERY AND MATERIEL (AOC 92D)

Quartermaster officers who belong to this AOC command, direct, plan, and manage units engaged in storage, packing, and preparation of materiel delivered by air.¹⁶ This includes being able to determine the appropriate requirements and devise effective plans for aerial delivery for tactical and special operations. Air Delivery officers may be less versatile than their 92A counterparts, but they will also be highly specialized since they are normally assigned only to light or airborne units. They are unique in another way as well because they work closely with the Air Force on a routine basis.

¹⁶ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 158.

PETROLEUM AND WATER (AOC 92F)

These officers manage units and activities engaged in petroleum and water operations. Their primary duties include the acquisition, storage, purification, testing, distribution and inspection of water and fuel (i.e. liquid logistics). They are heavily involved with transportation operations because of the complexity involved in moving bulk liquids from one location to another.

Petroleum and water officers are responsible for the inland distribution of bulk fuels, not only for Army units, but also for the Air Force and Marines by providing the necessary force structure to construct, operate, and maintain overland pipelines.¹⁷ Therefore, they are knowledgeable in joint operations because of their habitual relationship with the other services.

MORTUARY AFFAIRS (SI 4V)

Officers with this skill identifier command, direct, and coordinate mortuary affairs support including search, recovery, identification, and evacuation of deceased personnel as well as the collection and disposition of personal effects of decedents.¹⁸ Mortuary affairs operations are closely linked with transportation operations because deceased personnel must be evacuated out of theater and back to the next of kin in an expeditious manner. Additionally, mortuary affairs are often related to the CSS functions of combat health support and religious support.

TRANSPORTATION CORPS

Transportation Corps officers are responsible for the worldwide movement of units,

¹⁷ Department of the Army, *FM 100-10 Combat Service Support*, (Washington, D.C.: Headquarters, Department of the Army, 1995), A-5.

¹⁸ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 158.

personnel, equipment, and supplies in peace and war.¹⁹ Before reaching an objective, a commander will rely heavily on effective transportation operations to get his equipment and soldiers where they need to be at the critical moment. This includes using transportation assets to mobilize his forces and get them to the ports of embarkation (POEs); to deploy his forces and get them to the ports of debarkation (PODs); and to perform reception, staging, onward movement and integration (RSOI) to get his forces to their tactical assembly areas (TAAs). Transportation officers do extensive planning and coordination, and are heavily involved in every step of this process to ensure that combat units get to their objectives on time.

Transportation officers must be able to plan for the use of all modes of transportation which includes providing theater port opening terminal services, stevedore operations at fixed ports, military traffic management, and logistics-over-the-shore (LOTS) operations. They are routinely involved with joint operations since forces may move simultaneously by air, sea, and ground. Transportation officers may work in joint environments and at any of the three levels of war: strategic, operational, or tactical, regardless of rank. For example, a lieutenant in the Transportation Corps working as the officer in charge of an Arrival/Departure Air Control Group (A/DACG) works closely with the Air Force at both the operational and strategic levels of war.²⁰

The objectives of the Transportation Officer Basic Course are to prepare newly commissioned Transportation Corps Officers for duty at the company level. The curriculum emphasizes leadership; written and oral communications; problem solving; and gaining a working knowledge of the mission, capabilities, and operations of transportation units.²¹ The students learn how to be successful platoon leaders and transportation staff officers through practical application

¹⁹ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 140.

²⁰ Ibid.

²¹ "Trans OBC," Internet, <http://www.transchool.eustis.army.mil/training.asp>, accessed 14 March 2002.

vice theoretical instruction. The course's ultimate aim is to train each officer how to lead, how to maintain, and how to transport.

During the second phase of CLC3, Transportation officers learn how to become successful company commanders and transportation staff officers in multifunctional battalion and brigade-level staff logistics assignments.²² The five weeks at Fort Eustis, Virginia give students the technical skills they need to work in the different modes of transportation and movement control. The students also become familiar with terminal operations. This includes terminal operations at origin, destination, and in-transit terminals along lines of communication.

In order to carry out the many diversified and complex missions of the Transportation Corps, officers are assigned to one of the following AOCs: Transportation General (AOC 88A), Traffic Management (AOC 88B), Marine and Terminal Operations (AOC 88C), and Motor/Rail Transportation (AOC 88D).

TRANSPORTATION GENERAL (AOC 88A)

Officers in this AOC command, direct, control, coordinate, manage, and serve in positions requiring general knowledge of transportation organizations/equipment/doctrine, and those units that perform transportation related services.²³ These officers may use their knowledge of transportation operations to coordinate strategic movements to get units from one geographic region to another, or they may be involved in operational movements within theater.

TRAFFIC MANAGEMENT (AOC 88B)

Traffic Management officers plan, procure, coordinate, and control the movement of

²² "Combined Logistics Captains Career Course (CLC3)," Internet, <https://www.atrrs.army.mil/atrrscc/courseinfo.asp>, accessed 14 March 2002.

²³ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 140.

personnel, property, and freight across the globe by both military and commercial means.²⁴ Due to the global nature of the United States and its armed forces, these officers exercise their special skills daily in moving units, equipment, soldiers, family members, and personal belongings all over the world. These officers work in many capacities ranging from key positions in Movement Control Centers (MCCs), Installation Transportation Offices (ITOs), and the Military Traffic Management Command (MTMC).

MARINE AND TERMINAL OPERATIONS (AOC 88C)

Officers in this AOC command, direct, control, coordinate, manage, and serve in positions involving the water transport, marine maintenance, and marine terminal and inland terminal operations.²⁵ The functions performed in this AOC are critical because they allow forces to get in and out of ports by minimizing confusion and preventing unnecessary pauses. These officers allow force commanders to extend operational reach by managing fixed ports and opening unimproved ports or beachheads where ports do not exist. They are also responsible for Joint-Logistics-Over-The-Shore (JLOTS) operations; marine maintenance and salvage operations; air, rail, motor, and inland waterway terminal operations; and cargo transfer operations. Each of these operations requires special skills, which Transportation Corps officers gain through operational experience, training, and education. These skills are vital to Army operations at all levels of war.

MOTOR/RAIL TRANSPORTATION (AOC 88D)

Officers in this AOC command, direct, control, coordinate, manage, and serve in motor

²⁴ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management*, (Washington, D.C.: Headquarters, Department of the Army, 1998), 140.

²⁵ Ibid.

(truck), rail, truck terminal, or trailer transfer organizations.²⁶ These officers use their skills to transport forces via ground movement by rail or road. Special functions include increasing operational mobility through the use of truck terminal and trailer transfer points (TTPs), and the use of motor assets in clearing terminals to prevent congestion at key nodes.

MEDICAL SERVICE CORPS

The Medical Service Corps is a highly diversified branch involving many different skills and specialties. Its mission today is much the same as it was in World War I in that it relieves physicians from a variety of administrative, technical, and scientific duties in which the physicians are not sufficiently trained.²⁷ Some of these duties include: Medical logistics, medical operations, patient administration, hospital administration, preventative medicine, behavioral science, laboratory science, and optometry.

Medical Service Corps officers begin their military training and education by attending AMEDD OBC with officers from the Medical Corps. The course is divided into three phases: Preparatory, Common Core, and Track.²⁸ Officers only attend the one-week Preparatory Phase if they have not had any Army service or pre-commissioning training within the four years prior to them attending OBC. This phase orients new officers to basic customs and courtesies of the Army. During the Common Core Phase, officers study general military subjects for three weeks, attend a one-week field training exercise (FTX), and undergo four weeks of leader competency training. The FTX consists of chemical, biological, radiological, nuclear, high explosive (CBRNE) defense; land navigation; weapons marksmanship; maintenance; and Combat

²⁶ Department of the Army, *DA PAM 600-3 Commissioned Officer Development and Career Management* (Washington, D.C.: Headquarters, Department of the Army, 1998), 140.

²⁷ Directorate, AMEDD Personnel Proponency, *Medical Service Corps Officer Professional Development and Utilization Handbook* (Fort Sam Houston, TX: Directorate, AMEDD Personnel Proponency, 1992), 4.

²⁸ "AMEDD OBC," Internet, http://www.cs.amedd.army.mil/obc/SEP's/SEP_AC_02-01.htm, accessed 3 April 2002.

Health Support (CHS). The leader competency training includes how to use the Military Decision Making Process (MDMP); how to integrate CHS and combined arms warfare; how to lead and train soldiers; and how to maintain and care for equipment. The Track Phase is the final phase, where officers receive specific training related to their AOC. Depending on the AOC, this phase lasts one to five weeks. Descriptions of the specific logistic-related AOCs appear later in this paragraph.

During the second phase of CLC3, MSC officers prepare for command and staff positions, and other key roles within AMEDD. Students are challenged to present several briefings on Army medical doctrine, policy, and regulations, and then have to apply what they learn in practical exercises. MSC officers also participate along with other AMEDD officers in a capstone event called Medical Unit Staffs in Operation (MUSIO).²⁹ During this event, small groups of students replicate medical unit staffs in a medical brigade. The student cells prepare CHS estimates and task-organize their assets in support of a corps warfight scenario set in Korea.

Medical Service Corps officers use their junior officer training to perform very specific functions in eight different areas of concentration: Health Services (67A), Laboratory Sciences (67B), Preventative Medicine Sciences (67C), Behavioral Sciences (67D), Pharmacy (67E), Optometry (67F), Podiatry (67G), and Aeromedical Evacuation (67J). The first four AOCs listed are also sub-divided into medical functional areas (MFAs), of which there are twenty-nine in all. Officers designated in one of the Health Service MFAs plan, direct, and manage activities, which allow health care facilities and organizations to function properly. The specific MFAs under AOC 67A are: Health Care Administration (67A70); Health Services Administration (67A71); Health Services Comptroller (67A72); Health Services Systems Management (67A73); Patient Administration (67A75); Health Services Human Resources (67A76); Health Services Plans, Operations, Intelligence, Security, and Training (67A77); and Health Services Materiel (67A78).

²⁹ "AMEDD OAC," Internet, <http://www.cs.amedd.army.mil/oac/Phase II.htm>, accessed 3 April 2002.

Only officers designated as 67A77 or 67A78 can volunteer to attend CLC3 with the logistics officers from the other CSS branches. Those officers that choose to attend will normally be designated as FA 90s, Multifunctional Logisticians. Although each of these specialties directly supports the medical community, their functions are essentially logistical in nature and are therefore directly linked to the CSS community as well. Medical Service Corps officers designated in the other AOCs are more closely tied to the Medical Corps. In fact, most of the officers in these other fields are licensed doctors.³⁰ Consequently, they do not attend CLC3, and any further discussion of these officers is beyond the scope of this monograph.

HEALTH SERVICES PLANS, OPERATIONS, INTELLIGENCE, SECURITY, AND TRAINING (MFA 67A77)

Officers in this MFA serve as advisors to commanders at all levels in the areas of field medical operations and evacuation.³¹ They are responsible for planning, managing, integrating, and executing the commander's combat health support (CHS) plan. A large part of their duties entail clearing the battlefield of casualties through a well thought out evacuation plan. This requires proper synchronization of CSS assets and is critical in preventing loss of life. These officers must properly place ambulance exchange points (AXPs), provide for en route care, and have redundant evacuation means available.

HEALTH SERVICES MATERIEL (MFA 67A78)

Officers designated in this MFA are logisticians in every sense of the word. They plan, coordinate, control, and manage the materiel, facilities, services, and soldiers used in supporting the health care delivery system. They are responsible for medical supply and service operations

³⁰ Directorate, AMEDD Personnel Proponency, *Medical Service Corps Officer Professional Development and Utilization Handbook* (Fort Sam Houston, TX: Directorate, AMEDD Personnel Proponency, 1992), 23.

³¹ *Ibid.*, 30.

including the receipt, storage, inventory management, and issue of all Class VIII medical supply items. As staff officers, Health Services Materiel officers advise their commanders on all medical logistics matters to include unit capabilities and limitations. Additionally, they are responsible for developing medical logistics support plans. Finally, these officers may perform duties as health care facility planners where they design and construct health care facilities all over the world.

CHAPTER THREE

CURRENT CSS DOCTRINE

Army doctrine describes combat service support as a battlefield operating system (BOS) that generates and sustains combat power for employment in shaping and decisive operations at the time and place the force commander requires.³² Joint doctrine further describes CSS as the necessary capabilities, functions, activities, and tasks, needed to sustain all elements of operating forces in theater at all levels of war.³³ Therefore, CSS officers, or logisticians, are those individuals who provide these essential capabilities and functions for sustaining operations for the force commander. They do this by first considering the characteristics of CSS which are described in Field Manual 3-0, *Operations* (2000), also referred to as the principles of logistics by Joint Publication 4-0, *Doctrine for Logistic Support for Joint Operations* (2000). Logistics officers must then ensure that each of the CSS functions are included in the force commander's overall plan and be able to properly execute and integrate CSS in any type of operation. Finally, logistics officers must know how to employ the capabilities of the CSS organizations available for a particular operation.

CSS CHARACTERISTICS

Responsiveness. Responsiveness means providing the right support in the right place at the right time.³⁴ This characteristic demands that CSS officers properly anticipate logistics requirements for the supported commander. It also implies providing the force with just the right amount of supplies or support. Having too much CSS (i.e. the logistics footprint is too large)

³² U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-1

³³ U.S. Joint Staff, JP 4-0 *Doctrine for Logistics support of Joint Operations* (Washington, D.C.: Government Printing Office, 2000), I-1

³⁴ U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-3.

may cause the force commander to lose the initiative and leave his rear area much more vulnerable to attack. Not having enough CSS will of course cause the force commander's operations to culminate prematurely.

An officer with multifunctional logistics training is likely to be more responsive than one who has only had training in a specific branch. For instance, a junior Ordnance officer, due to his branch-specific training, might be considered a responsive maintenance officer, but he may not be a responsive CSS officer. It is the author's experience with twenty-eight months as a maintenance platoon leader and nineteen months as a maintenance control officer in a DS maintenance company, that the primary focus of an Ordnance lieutenant is on repairing customer equipment to reduce the backlog. In reducing the backlog and keeping the backlog manageable, there is a strong tendency to stockpile parts. Having a large number of parts that are not ordered against specific job orders is counter-responsive. If the lieutenant is trained as a combat logistician from the time he enters OBC, then he will be more cognizant of his higher units' missions involving the other CSS functions.

Simplicity. Simplicity means avoiding complexity in both the planning and the execution of CSS operations.³⁵ CSS officers must be able to convey their ideas and plans in a clear and concise manner so that their commanders can make sound decisions and so that their subordinates can properly perform their assigned missions.

General Carter B. Magruder, who spent the last twenty of his twenty-eight years of Army service (1941 to 1961) in major logistics assignments, recognized that simplicity in logistics was essential during an age when the complexity of equipment was increasing. He also realized that simplicity was harder to achieve during a time of rapidly advancing technology. As the Deputy Chief of Staff for Logistics, he attempted to alleviate this problem through "the development of

³⁵ U.S. Department of the Army, *FM 100-10 Combat Service Support* (Washington, D.C.: Headquarters, Department of the Army, 1995), p 1-3.

generalist logisticians.”³⁶ Although they were not called multifunctional logisticians at the time, these generalists were essential in directing and clearly articulating the increasingly complex missions of their subordinates. Multifunctional officers are better prepared than functional officers in conveying their ideas in simple terms because they have a better grasp of the overall CSS situation.

Flexibility. Flexibility involves the ability or expertise to adapt CSS structures and procedures to meeting changing situations, missions, and concepts of operations.³⁷ The key to this characteristic is being able to improvise when preferred means of support are not available or are not feasible. CSS officers must be flexible enough to adapt to ever changing, fast-paced operations.

Functional logistics officers are less flexible than multifunctional logistics officers because their single-tracked training has not allowed them to adapt to the many different CSS situations that they will face throughout their careers. For instance, a Quartermaster lieutenant working as a supply officer in a battalion support operations section has naturally had experience in supply operations. He has probably not, however, had experience in direct support maintenance operations. If the section’s maintenance officer position is vacant, the lieutenant would most likely have trouble dealing with a customer unit who has a maintenance-related problem. A lieutenant that has been trained in a multifunctional environment, on the other hand, would be able to better handle this problem, and to adapt to any other CSS issue that arises.

Attainability. Attainability means being able to generate the minimum essential supplies and services necessary to begin operations.³⁸ After CSS staff officers complete their initial logistics estimates for the commander, the commander can determine if the minimum essential level of

³⁶ Carter B. Magruder, *Recurring Logistics Problems As I Have Observed Them* (Washington, D.C.: Center of Military History United States Army, 1991), 52.

³⁷ U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-3.

³⁸ Ibid.

support is available so he can begin operations. This characteristic is somewhat related to the characteristic of responsiveness because the commander always wants to try to reduce his logistic footprint by not stockpiling more than his units need.

During Operation Restore Hope in Somalia, the 10th Mountain Division faced a major logistics problem at the ports of debarkation (PODs). The division, which was fully prepared to logistically support its own organic units, was not ready to handle the problems linked to the offloading of pre-positioned ships, the rapid arrival of units into country, and the confusing and slow operations at the PODs. These problems were directly attributed to the late deployment of key transportation personnel.³⁹ Perhaps if the individuals who were already deployed were trained as multifunctional logistics officers from the time they entered the Army, the problem of not having the right services in place at the ports to begin operations (i.e. lack of attainability) could have been prevented, or at least alleviated.

Sustainability. Sustainability means having the ability to maintain continuous support during all phases of campaigns and major operations.⁴⁰ This characteristic is what prevents an operation from culminating. CSS officers plan for uninterrupted support over time to ensure that the commander can successfully meet his objectives.

One of the best examples of investigating how well the logistical support structure sustained campaigns is the Civil War. Both armies had similar logistics systems built around four main departments: the Quartermaster General, the Commissary General, the Chief of Ordnance, and the Surgeon General. Most of the logistics problems that both sides encountered stemmed from the fact that these departments functioned independently and had no central coordination.⁴¹ During the Maryland Campaign of 1862, the Army of Northern Virginia and the Army of the

³⁹ Yves J. Fontaine, “*Strategic Logistics for Intervention Forces*,” *Landpower in the 21st Century: Preparing for Conflict* (Carlisle, PA: U.S. Army War College, 1998), 135.

⁴⁰ U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-3.

⁴¹ Charles R. Shrader, *United States Army Logistics 1775-1992: An Anthology* (Washington, D.C.: Center of Military History United States Army, 1997), 195.

Potomac both faced serious problems with sustaining its soldiers, specifically in the functions of supply and transportation due to the great distances involved. There were no multifunctional logisticians at all, and there were only a very few functional officers who were properly trained in their own area of logistics. If the armies had invested more effort in training the few logistics officers that they had to be multifunctional logisticians, then the logistics structures within the two armies could have done much better in sustaining the campaign.

Survivability. Survivability means being able to protect support functions from destruction or degradation.⁴² In most operations, CSS activities are critical vulnerabilities, and in some cases centers of gravity for a particular operation. Commanders must therefore use both active and passive measures in protecting lines of communication (LOCs), aerial ports of debarkation (APODs), seaports of debarkation (SPODs), and logistics bases from a variety of threats including enemy special forces, theater ballistic missiles, and weapons of mass destruction. If a commander can not adequately safeguard his logistics, then he will lose the ability to properly conduct operations.

During the Falkland Islands Campaign in 1982, an Argentine air strike on a British beach support area interrupted British logistics. The strike caused thirty-nine casualties and destroyed forty-five Milan missiles, 200 rounds of 81mm mortar ammunition, and 300 rounds of 105 mm ammunition.⁴³ The result was that a battalion did not get sufficient ammunition, and therefore did not have the firepower it needed at the critical moment in the fight. The lesson learned from this example is that logistics bases are vulnerable to attack and must be defended. Logistics bases contain different CSS organizations, each with their own unique types and quantities of personnel and equipment. Because of their training, multifunctional logisticians have a better grasp on these different units and can therefore better provide for their protection (i.e. exact positioning of

⁴² U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-3.

⁴³ Julian Thompson, *The Lifeblood of War: Logistics in Armed Conflict* (London: Brassey's, 1991), 279.

units and assets within the support area or use of customer weapon systems in defense of the perimeter). At the very least, they have studied how the different units are doctrinally integrated into a logistics base defense plan.

Economy. Economy means providing the most efficient support to accomplish the mission. Commanders consider this characteristic when prioritizing and allocating resources.⁴⁴ When commanders use economy of logistics, they also accept a certain amount of risk. CSS officers should be able to provide adequate support using just enough resources at the exact moment when they are needed, but with an acceptable level of risk.

In December 1998, the 7th Corps Support Group received the mission to provide reception, staging, and onward movement (RSO) from Skopje in the Former Yugoslavia Republic of Macedonia (FYROM) in support of Task Force FALCON. Group level planners came up with a robust task organization of 800 soldiers, which they thought was needed to properly support the mission logistically; but V Corps wanted to limit the number of soldiers to 250.⁴⁵ Higher staffs are forced to think in more multifunctional terms than their subordinate staffs. In this case, the corps level planners were able to incorporate the characteristic of economy during the earliest stages of planning to support the RSO mission with the minimum number of assets. The V Corps staff was also keeping in mind the restrictions of the Task Force FALCON personnel cap. Multifunctional logisticians better understand how to provide efficient support, and how to prioritize assets to accomplish the mission.

Integration. Integration means synchronizing CSS operations with all aspects of Army, joint, interagency, and multinational operations.⁴⁶ It also means that CSS must be synchronized with operational efforts, especially at the strategic level of war. CSS officers must fully understand the

⁴⁴ U.S. Department of the Army, *FM 3-0 Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-3.

⁴⁵ Paul D. Brown, "Birth of a Supply Support Activity," *U.S. Army Logistics: Enabling CS/CSS Transformation* (Alexandria, VA: U.S. Army Logistics Integration Agency, 2001), 71.

⁴⁶ U.S. Department of the Army, *FM 100-10 Combat Service Support* (Washington, D.C.: Headquarters, Department of the Army, 1995), 1-3.

commander's intent so that the CSS plan effectively supports the tactical, operational, and strategic plans.

During Napoleon's Russian Campaign from 1811 to 1812, there were logistical problems associated with the failure to integrate CSS functions:

In any case it was a failure of cooperation. If the commissary, engineers, and transport had been coordinated under one logistical head, the different functionaries thereof would have been made to serve each other to meet the tactical requirement; or if it became apparent to such logistical head that the tactical requirement could not be met, he, familiar with the coordinated effort, could more readily make the proper representations to the commander, so that the requirements could be modified, than could several separated heads, who would not be able to say that the united efforts of commissary, engineer, and transport could not meet the requirement. Furthermore, if all these subservient functions are organized as a logistical unity, they work in cooperation in preparing the way for Tactics in response to the requirements of Strategy. So in this case of the failure of the victual trains to get up, there was not harmonious preparation.⁴⁷

This example from history shows that there has always been a need to integrate separate logistics functions in order to achieve success. Likewise, the example indicates that individuals with general knowledge of all the functions are better suited to do this coordination.

CSS FUNCTIONS

The 1993 version of *Operations*, Field Manual 100-5, described six tactical logistics (TACLOG) functions: manning, arming, fueling, fixing, moving, and sustaining soldiers and their systems. These functions are self-descriptive action words and each one relates to a specific type of officer. For instance, 'movers' are Transportation officers, 'fixers' are Maintenance officers, and 'armers' are ammunition officers. The current *Operations* manual, FM 3-0, replaces the six TACLOG functions above with eleven key CSS functions. The first five functions listed in Chapter Twelve of FM 3-0 are: maintenance, transportation, supply, combat health support, and field services. Although they are somewhat related to the officer branches, these new doctrinal

⁴⁷ George C. Thorpe, *Pure Logistics: The Science of War Preparation* (Washington, D.C.: National Defense University Press, 1986), 13.

terms have much broader meanings and they require integration of CSS efforts. For example, The term 'supply' can refer to all classes of supply, the movement of those supplies, the protection of those supplies, the storage of those supplies, the distribution of those supplies, etc. Likewise, the term 'transportation' is more than just moving things. It also implies that maintenance capabilities must be coordinated at the POEs and the PODs to ensure that port operations do not become backed up with equipment. These examples support the fact that multifunctional officers are better prepared than functional officers to support the new CSS functions because of their broader meanings and the implied, but critical need to integrate all aspects of CSS.

Although the other six CSS functions (EOD, human resource support, financial management operations, religious support, legal support, and band support) are important and should always be integrated into the force commander's overall plan, they are not normally performed by the logistics branch officers discussed above. Instead, officers from other branches like the Adjutant General Corps, Finance Corps, Chaplain Corps, and Judge Advocate General Corps normally plan and execute these six CSS functions, with the exception of EOD which, as stated in Chapter Two, is part of the Ordnance Corps. Field Manual 3-0 also mentions general engineering and contracting as elements that support sustaining operations. The Army has specially trained officers to perform these two additional functions as well.

CSS EXECUTION

If any strategic, operational, or tactical plan is to be successful, the force commander and his logistics officers must properly integrate the right amount and type of CSS into that plan. If not, a force may be compelled to achieve an undesired end state; it may be forced to culminate too soon; or it may even experience a great number of casualties. Therefore, it is critical that versatile and knowledgeable logistics officers help the force commander to fully consider and execute CSS across the full spectrum of operations. Whether it be in offensive or defensive

operations; in stability or support operations; or in joint or multinational operations, CSS officers guide CSS organizations in providing the right support.

During offensive operations, the tempo is fast and there is a lot happening simultaneously. The force commander wants to avoid unexpected culmination, sustain momentum, and maintain freedom of action to exploit success.⁴⁸ In achieving these goals, he integrates CSS into his plans. This may include logistics estimates that calculate potential losses, movement distances, fuel requirements, and the number of additional transportation assets needed – all of which are normally increased for a force in the offense. CSS officers who have been trained in all these areas are better equipped to advise their commanders on CSS matters. They are also better equipped to handle CSS problems that develop during offensive operations such as having to redistribute fuel or ammunition because one of the subordinate battalions becomes critically low s after facing a tougher enemy than expected.

During defensive operations, the positioning of CSS forces and assets depends heavily on the type of defense that the force commander wants to employ. In a mobile defense, commanders may place CSS assets further back than normal to create more maneuver space, and they may plan for more fuel consumption than when using an area defense.⁴⁹ Logistics estimates will most likely indicate that the requirements for ammunition and barrier material will increase. Once again, the multifunctional CSS officer will most likely be better prepared than his one-dimensional counterpart to handle multiple situations while in the defense.

In stability operations, the level of logistical support may vary greatly depending on the mission. During a peace enforcement operation for example, the force commander's CSS requirements for fuel and ammunition will normally be higher than his requirements during a peace keeping operation since the operational intensity is inherently higher. CSS units must

⁴⁸ U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-11.

⁴⁹ *Ibid.*, 12-12.

remain flexible in stability operations since they must quickly be able to transition between high and low intensity situations.

During support operations, CSS forces may conduct the decisive operation.⁵⁰ CSS officers are often faced with the complex dilemma of providing an overwhelming number of civilians critical supplies and services following a natural disaster, or during a humanitarian assistance (HA) operation. The lack of a viable infrastructure (road network, electricity, etc) in underdeveloped countries or in those countries devastated by a fire or a hurricane, for example, will further complicate matters. Close coordination with local authorities, government organizations, and non-government organizations (NGOs) is inevitable and important to successful support operations. Multifunctional logisticians involved in these types of missions will be coordinating with interagency staffs and handling a variety of CSS missions. They must therefore be somewhat knowledgeable in all the CSS functions, and not just in the functions that pertain to their own branch.

CSS ORGANIZATIONS

Multifunctional and functional CSS units perform logistics missions to support and sustain military operations. Almost all active component CSS organizations at the battalion level and above have now been converted to multifunctional units. The Army started this initiative in the 1980s for CSS units to provide more responsive and integrated support to their customers – the combat forces. For instance, Theater Support Commands (TSCs), Corps Support Commands (COSCOMs), Corps Support Groups (CSGs), Corps Support Battalions (CSBs), Main Support Battalions (MSBs), and Forward Support Battalions (FSBs) are all examples of multifunctional logistics units, each of them made up of different CSS units and capabilities. These units

⁵⁰ U.S. Department of the Army, FM 3-0 *Operations* (Washington, D.C.: Headquarters, Department of the Army, 2001), 12-13.

normally have organic maintenance, supply, transportation, medical service, and field service capabilities. Since these units can provide many different CSS capabilities, they are able to better serve their customers across the full spectrum of operations. CSS staff officers within these organizations must be knowledgeable in all the missions of the subordinate units.

The Army still has many functional battalions, however, which enhance an operational commander's logistical support when needed. Examples of these units are transportation groups, maintenance battalions, medical logistics battalions, supply and service battalions, etc. Although these can be very valuable force multipliers, they are not as responsive as the multifunctional units. These battalions have only one type of service to offer their customers. If the customers require other help, they have to find another support unit.

Below the battalion level, CSS units are mainly functional, except for maintenance companies which have technical supply platoons to operate the Class IX warehouse. The specific capabilities, equipment, and military occupational specialties (MOSs) that a CSS company or detachment is authorized on its MTOE will vary depending on the type of combat arms and combat service units it supports. A unit that supports heavy combat forces with tanks and other tracked systems will have more equipment than those units that support light forces. CSS officers (i.e. lieutenants) within these companies are generally serving with troops as platoon leaders or executive officers. After their troop time, which is normally no longer than twelve months, some lieutenants will serve in special positions related to their branch. For example, some Ordnance lieutenants get to serve as maintenance control officers (MCOs) and some Quartermaster lieutenants get to serve as accountable officers of supply support activities (SSAs). Following their time in these branch specific positions, CSS lieutenants can expect to work at the battalion, group, DISCOM, or even COSCOM level where their work will be multifunctional in nature.

CHAPTER FOUR

FUTURE CSS OPERATIONS

Within the last decade, there have been more than fifty ethnic wars and 170 border disputes.⁵¹

This regional instability and violence will most likely continue for many years to come as globalization will continue to create cultural, religious, and economic friction all over the world. There is little doubt that the United States is the sole remaining superpower and has the ability to project its combat forces anywhere in the world. However, it will still be challenged by regional powers or even terrorist groups that believe they can rapidly escalate a military conflict to create conditions where the U.S. will not get involved because of the risk. This has created a future battlefield called the Contemporary Operating Environment (COE). The COE will most likely include the following: Close fighting in urban areas and complex terrain; a high volume of media coverage; many non-combatants throughout the battlespace (displaced civilians, refugees, and government organizations), and technological advancements.⁵²

The Army Vision calls for a rapid, strategically responsive force that can perform any mission in the COE. Specifically, the Army must have the capability to deploy a combat brigade anywhere in the world in 96 hours. It must then build upon that initial brigade and have a division fully deployed in 120 hours followed by five divisions in 30 days. This new capability will require logisticians to deploy forces more rapidly, and then to support those forces more responsively once in theater. In doing so, they must figure out how to reduce the logistics footprint while not sacrificing combat power. To meet these new challenges, the Army has approved the development of the IBCT, the IDIV, and the Objective Force. CSS officers will be challenged more than ever to provide rapid, responsive support throughout the COE while serving in these new units.

⁵¹ TRADOC DCSINT, "The Future Operational Environment", 15 May 2001

⁵² Ibid.

INTERIM BRIGADE COMBAT TEAM

The IBCT is a rapidly deployable combat brigade task force that has increased tactical and operational agility. With augmentation, it can fight as part of a division and is capable of full spectrum operations.⁵³ In small-scale contingencies, the IBCT can rapidly deploy to stabilize or terminate a crisis anywhere in the world by arriving during the early stages of the crisis. The IBCT may be able to prevent a crisis before it even starts by denying a potential adversary a set of favorable conditions, and by convincing him that the IBCT is capable of conducting decisive combat operations. In stability operations, the IBCT may be the initial force deployed to separate belligerents in an unstable area or it may have to protect joint and coalition peacekeeping (PK) or peace enforcement (PE) forces. In support operations, the IBCT can perform humanitarian assistance (HA) or domestic support missions due to its responsive nature. In a major theater war scenario, the IBCT will fight with augmentation as part of a division. In that capacity, it can either be part of the main attack or it can conduct a supporting attack. It can also fight as the division's reserve force.

ADVANCEMENTS IN TECHNOLOGY

Improved technology allows the IBCT to pass and share information more rapidly than the enemy can. Unlike an Army of Excellence (AOE) or Force XXI brigade, the IBCT does not attempt to gain battlefield awareness through maneuver or by making contact with its smallest element. Instead, the IBCT develops situational awareness through advanced technology and then maneuvers its forces out of contact. It then destroys the enemy upon making initial contact at a time and place that is favorable to the IBCT.

Another area in which improved technology enhances the IBCT's capabilities is CSS. The IBCT's combat systems will have improved on-board prognostics and diagnostics resulting in

⁵³ "Interim Brigade Combat Team," Internet, http://www.cascom.lee.army.mil/multi/fm_4-93.7_coord_draft.htm, accessed 22 January 2002.

less maintenance problems and increased operational readiness rates. Systems will indicate when they will break down before they break down. Systems will also indicate exactly what the problem is so that mechanics can make the right repairs or replace the right part as quickly as possible.

CHANGES IN CSS DOCTRINE

Enhanced technology will allow new CSS doctrine and organizational changes to emerge in order to properly support the IBCT on future battlefields. Although the CSS characteristics and functions will continue to guide logisticians in the planning and execution of new operations, specific changes will occur in maintenance, supply, transportation, and medical support doctrine. Rapid force projection will reduce the need for reception, staging, onward movement, and integration (RSOI) because units will deploy ready to fight when they arrive in a theater. The concept of replacing forward and fixing rear will supplant the old concept of fixing forward. Additionally, the four levels of maintenance will be reduced to two as organizational and direct support maintenance is combined. All systems will have increased fuel efficiency, thus reducing the need to stock bulk fuel. Authorized stockage lists (ASLs) will be greatly reduced and maintenance capabilities will be very basic. This will cause forces to rely heavily on battlefield distribution, velocity management, and a responsive Class VII replacement system.⁵⁴ Units will be able to treat casualties forward on the battlefield by means of telemedicine, which reduces the need of emergency air and ground evacuation assets. Finally, units will deploy with ammunition basic load (ABL) and initial sustainment stocks, thus reducing the need to stockpile large amounts of Class V in the brigade area at the outset of an operation.

⁵⁴ "Interim Brigade Combat Team," Internet, http://www.cascom.lee.army.mil/multi/fm_4-93.7_coord_draft.htm, accessed 22 January 2002.

CHANGES IN CSS ORGANIZATION

The Brigade Support Battalion's (BSB) mission is to provide CSS to the IBCT and command and control over its subordinate units.⁵⁵ Its structure is simple and very much resembles the current forward support battalion (FSB). The BSB consists of a Headquarters and Distribution Company, a Brigade Support Company, and a Brigade Support Medical Company.

The Headquarters and Distribution Company (HDC) has the supply and transportation assets required to provide support to the IBCT. It has a Supply Support Platoon that receives and issues Classes I, II, III(packaged), IV, V, VII, and IX. This platoon also operates the ammunition transfer point (ATP) where Class V is distributed to units in mission configured loads (MCLs). The HDC has a Fuel and Water Platoon which distributes Class III(bulk) and bulk water. It also has a water purification capability. Finally, the HDC also has a transportation platoon to provide lift for the movement of all classes of supply, except bulk fuel and water.

The Brigade Support Company (BSC) is very similar to the Force XXI version of the BSC in the FSB. It has various platoons and sections that specialize in repairing different equipment and weapon systems. The BSC is structured with four Combat Repair Teams (CRTs) to support the a new maintenance concept described earlier in this chapter: Replace components forward and fix rear.⁵⁶ The CRT's can perform battle damage and assessment (BDA) on equipment forward on the battlefield. They can then quickly inspect the equipment and determine if they can fix the problem by replacing a component. If not, the item must be evacuated to the rear where it can be properly repaired. The BSC has recovery assets to move combat systems that can not be fixed quickly to the rear.

The Brigade Medical Support Company (BSMC) resembles the Forward Support Medical Company from the FSB. It still has preventative medicine and mental health sections, a treatment

⁵⁵ "Interim Brigade Combat Team," Internet, <http://www.cascom.lee.army.mil/multi/training/bsb.htm>, accessed 22 January 2002.

⁵⁶ "Interim Brigade Combat Team," Internet, <http://www.cascom.lee.army.mil/private/isd/singlesf/2000august04/sld018.htm>, accessed 22 January 2002.

platoon, and an evacuation platoon. The BSMC still requires augmentation from Corps with a Forward Surgical Team (FST). The only significant change is the three-soldier Medical Detachment Telemedicine Team (MDT), which allows casualties to be treated well forward on the battlefield without doctors being physically present.⁵⁷

INTERIM DIVISION

The general concepts behind the IBCT and the IDIV are the same. They are both flexible enough to transition between different types of operations, they fight the same, and they use the same technology. The CSS concepts are the same in both organizations also: Distribution-based versus supply-based logistics; improved prognostics and diagnostics; reduced logistics footprint by having limited ASLs and systems with better fuel consumption; two levels of maintenance; replace forward/fix rear procedures; a responsive supply system; and enhanced medical procedures.

The organizational structure of the IDIV follows a logical pattern as well. The IDIV has three IBCTs, an Air Cavalry Brigade, a Field Artillery Brigade, an Engineer Group, and a Divisional Maneuver Support Brigade. The Divisional Maneuver Support Brigade (DMSB) is similar to the DISCOM. Its mission is to provide sustainment to IDIV forces to include supply, field maintenance, distribution, medical, materiel, transportation support, automation management, and integrated echelon above division (EAD) support.⁵⁸ EAD support is important to the IDIV because one of the key objectives of the IDIV is to keep the logistics footprint small. Therefore, the IDIV requires EAD to provide EOD support, host nation support (HNS), the Logistics Civilian Augmentation Program (LOGCAP), air medical evacuation assets, contracting,

⁵⁷ "Interim Brigade Combat Team," Internet, http://www.cascom.lee.army.mil/multi/fm_4-93.7_coord_draft.htm, accessed 22 January 2002.

⁵⁸ "Interim Division," Internet, <http://www.cascom.lee.army.mil/multi/fm4.93.xx.htm>, accessed 22 January 2002.

cargo transfer and port clearance operations, personnel and finance support, and Defense Logistics Agency (DLA) and Army Materiel Command (AMC) support. Internally, the DMSB has a Division Materiel Center, a Divisional Air Cavalry Support Battalion, and a Divisional Troop Support Battalion. The Divisional Troop Support Battalion (DTSB) is similar to the MSB, except for the creation of three Combat Service Support Companies (CSSCs). These units consist of maintenance, supply, transportation, and multiple field feeding sections. They are structured to feed the IBCTs and augment the IBCT's BSB with maintenance, supply, and transportation support about ten days after the IBCT deploys.⁵⁹

OBJECTIVE FORCE

The final outcome of the Army's transformation is the Objective Force. Like the IBCT and IDIV, the Objective Force will have the capability to deploy rapidly anywhere in the world and conduct decisive offensive, defensive, stability, or support operations as part of a joint or multinational force. The objective force will also capitalize on the latest technology resulting in increased lethality, increased responsiveness, and reduced logistical requirements.

The key to the Objective Force is the Family of Future Combat Systems (FCS). These systems will rely heavily on embedded prognostics and diagnostics to let operators and maintainers know when the system will be inoperable and what the problem will be before the system ever breaks down. Additionally, the FCS should be able to operate for at least seven days without maintenance or support.⁶⁰ Units will not have to stock as many repair parts because there will be more common parts between systems. The FCS will also weigh less and be ultra-fuel

⁵⁹ "Interim Division," Internet, <http://www.cascom.lee.army.mil/private/isd/gcss-army/requirement/boip/sld019.htm>, accessed 22 January 2002.

⁶⁰ John G. Coburn, Gen., "U.S. Industry – A vital partner in U.S. Army CS and CSS Transformation", *US Army Logistics: Enabling CS/CSS Transformation* (Alexandria, VA: U. S. Army Logistics Integration Agency, 2001), 6.

efficient. This means less bulk fuel will be needed in theater, therefore producing a smaller logistics footprint.

Although better technology should alleviate many CSS requirements on the battlefield, supporting the Objective Force logistically will still be challenging. First of all, CSS officers must be able to plan for the delivery of supplies using multiple, unimproved entry points instead of using one or two major APODs or SPODs. Since the improved entry points will be vulnerable to attack or may not even exist, forces and supplies will now flow through entry points that planners would not have previously considered. Likewise, in the COE the LOCs are vulnerable to a variety of threats as well. Therefore, once the units and supplies are in theater, units may have to be resupplied via “pulse logistics”. This means that a LOC will open at the right time to support a combat force, then it will close. The LOC may open up again when the unit requests resupply or it may not if the risk is considered too high.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATIONS

In *The Fifth Discipline*, Peter Senge states that the organizations that will truly excel in the future will be the ones that become “learning organizations”.⁶¹ In other words, those organizations that are truly open to change are more successful over time, and those organizations that get comfortably mired into paradigms find themselves losing to their competitors. The United States Army has shown that it is a learning organization and that it is open to change. The Army is evolving into a lighter, more lethal force that can rapidly deploy anywhere in the world prepared to face any conflict. As the Army undergoes this transformation, the logistics branches should also transform by combining the logistics officers into one branch called the Combat Logistician Branch. Its multifunctional officers would be more versatile, more supportive of current doctrine and future operations, and easier to manage.

INCREASED VERSATILITY

Due to the fact that their training will be multifunctional in nature from the time they are lieutenants, Combat Logisticians will be more resourceful and more flexible than functionally trained officers who only receive seven weeks of multifunctional training at CLC3. Although this can not be yet proven because there are no officers that have had multifunctional training from the start of their careers, it is only logical. Combat logisticians would be able to react faster to CSS problems that arise during operations because they would at least have a base of knowledge that included all areas of CSS. The functionally trained officers on the other hand could react to CSS problems also, but their knowledge base would only consist of their own experience and their more limited multifunctional training. This is unless of course the particular problem

⁶¹ Peter M. Senge, *The Fifth Discipline* (New York: Currency Doubleday, 1990), 4.

happened to be related to the functional officer's area of expertise.

If the Army decides to create one branch for logistics officers, then one might fear that the officers will become "jacks of all trade" instead of experts in a specific area. The little bit sacrificed in depth, is made up for in officer versatility. In a briefing given to Ordnance officers attending CGSC, the Chief of Ordnance stated that, "A multi-skilled Ordnance officer is better for the Army."⁶² He was referring to the initiative to combine the 91B (maintenance) and 91D (munitions) AOCs in order to increase future command and branch qualifying (BQ) opportunities. On a larger scale, the multi-skilled Combat Logistician is better for the Army too.

Other countries' armies are striving to produce more versatile logistics officers to meet tomorrow's challenges as well. As a result of less than optimum performance by British logistics officers in Operations Desert Shield and Desert Storm and in the Falkland Islands, the British Army created the Royal Logistics Corps to improve CSS operations by producing more versatile logistics officers.⁶³

BETTER SUPPORT OF CURRENT DOCTRINE

Multifunctional logistics officers are better equipped to use current doctrine than functional logistics officers because CSS consists of many interrelated functions that involve synchronization and integration. Field Manual 3-0, *Operations* and Field Manual 4-0, *Logistics* describe the CSS functions and how they are interrelated. Functional logistics officers, especially lieutenants, often do not understand how the CSS functions are interrelated. Although they are very good at managing the specific area in which they are familiar, the overall logistical picture is

⁶² BG Mitchell Stevenson, "Ordnance Update From Chief of Ordnance," PowerPoint Briefing, Slide 16, 10 May 2001.

⁶³ MAJ Martin S. Wagner, *Multifunctional Logistics Officer Corps: Should the U.S. Army Consolidate the Officer Corps of the Transportation, Quartermaster, and Ordnance Corps into One Multifunctional Branch?* (Fort Leavenworth, KS: United States Army Command and General Staff College, School of Advanced Military Studies, AY 1999-2000), 35.

not clear to them. Multifunctional logisticians, however, see the big picture with much more clarity. They are able to see how the missions of all the CSS organizations, not just the one he is currently serving in, are related to support the force commander in accomplishing his mission.

Joint Publication 4-0, *Doctrine for Logistic Support of Joint Operations* explains the principles, or characteristics of logistics, which complement the principles of war. Again, multifunctional logistics officers are better at applying the principles of responsiveness, simplicity, flexibility, attainability, sustainability, survivability, economy, and integration in any type of organization.

Most CSS organizations are functional below the battalion level. One might therefore argue that functional officers (lieutenants and captains) are best suited for the leadership positions within the company. One might argue further that multifunctional officers in these positions may not know enough about the specific missions of the platoons and companies that they lead. But this is not necessarily true. Does an Ordnance lieutenant know enough about the platoon that he will lead before he actually works in the position for several months? The functional training that he receives in OBC will help get him started, but he will have to rely on the expertise of his non-commissioned officers (NCOs) and warrant officers to properly train him on the platoon's mission. The multifunctional officer, or even an officer from a different branch would do just as well, given the fact that the primary concern of any officer in charge of troops is to care for those troops through the use of effective leadership. Basic leadership instruction is included in every officer's training, regardless of branch.

As an Ordnance captain commanding a maintenance company, the unit will more than likely have several maintenance platoons and a Class IX supply support activity. By current organization, most maintenance companies are multifunctional because they integrate the functions of supply and maintenance quite well.

To better support the Army's current CSS doctrine, the author recommends that the Army create the Combat Logistician Officer Basic Course (CLOBC). This new course would have two

phases and last a total of nineteen weeks. The first phase should be seven weeks long and concentrate on basic leadership skills, written and oral communication skills, and problem solving techniques. The second phase should last twelve weeks and consist of multifunctional logistics in company and battalion operations. Its goal would be to train Combat Logistician lieutenants to be successful platoon leaders and staff officers in multifunctional CSS battalions. This would also be compatible with the new Basic Officer Leaders Course (BOLC).

Another change that must occur is that the Combined Logistics Captains Career Course (CLC3), which currently has four phases and lasts a total of twenty-four weeks, should be reduced to three phases and last twenty weeks. With a Combat Logistician branch, there would no longer be a need for the five-week, branch-specific phase. The first phase should last five weeks and continue to concentrate on communication skills, company level operations, and leadership. Phase Two should be nine weeks long and focus on training captains in all aspects of multifunctional logistics. The third phase would continue to be the six-week staff officer training phase at Fort Leavenworth, Kansas.

By doing away with the need for a five-week resident phase, the Army would save money. Hundreds of students each year would no longer have to go on temporary duty (TDY) to their individual branch schools. This would also translate to less hardship on families since the officers would not have to leave their permanent duty station for five weeks in the middle of a twenty-four week school.

BETTER SUPPORT OF FUTURE OPERATIONS

The IBCT, the IDIV, and the Objective Force are designed to allow joint and multinational force commanders to execute high tempo, distributed, non-contiguous operations across the full spectrum of conflict. This calls for officers, and especially CSS officers, who have the tactical and operational flexibility to visualize, describe, and direct these operations in the COE.

As was already mentioned, company-sized units and lower are currently functional. But with the IBCT, the IDIV, and the objective force, multifunctional logistics companies begin to emerge. For instance, the Headquarters and Distribution Platoon within the IBCT has both supply and transportation platoons assigned to it. Another example is the IDIV's Combat Service Support Company (CSSC). It has maintenance, supply and transport, and subsistence capabilities to perform a wide range of service and support functions. Multifunctional officers need to lead these types of organizations.

INCREASED SIMPLICITY

If the Army created the Combat Logistician branch it would be adhering to an important principle – simplicity. First of all, the development of a Combat Logistician branch would simplify the training process because it is much easier to train officers at one school than it is to train them back and fourth between four or five different schools. The individual OBCs and Phase Two CLC3s had nearly identical objectives in training their junior officers. In several cases, the curriculums almost matched, especially in the areas of leadership and communications.

Another function that would be simplified would be the assignment process. Arguably the Combat Logistician branch would become the largest branch, and therefore unmanageable, but the converse is actually true. Instead of having to assign the right number of Ordnance, Quartermaster, Transportation, and selected Medical Service Corps officers to the right posts at the right times, United States Army Personnel Command (PERSCOM) would now only have to manage a single CSS branch. Individual branch assignments officers would no longer have to coordinate which officers were going to branch qualifying multifunctional (90A) positions because there would now only be one branch from which to assign logistics officers.

OTHER RECOMMENDATIONS

The medical functional area (MFA) 67A77 and 67A78 officers from the Medical Service Corps should become Combat Logisticians along with their Ordnance Corps, Quartermaster Corps, and Transportation Corps counterparts. Their duty descriptions, positions, and actions clearly make them logistics officers who perform the CSS function of Combat Health Support. All the other officers designated in MFAs that belong to the eight areas of concentration (AOCs) mentioned in Chapter Two should remain as part of the Medical Service Corps, or could even switch to the Medical Corps. Most of the officers in these other MFAs are either doctors or licensed practitioners by regulation (i.e. podiatrists, pharmacists, optometrists, etc.).

The CSS functions listed in Chapter 12-7 of FM 3-0, *Operations* should relate directly to the Combat Logistician Branch. They should characterize what the officers that are Combat Logisticians do. Therefore, the CSS functions should be reduced to five: Maintenance, Transportation, Supply, Combat Health Support, and Field Services. These functions correspond with the training these officers receive, and with what these officers do in peace and in war. Furthermore, five functions are much easier for non-logisticians to grasp and to consider when planning and incorporating CSS into an operation. As for the function of Explosive Ordnance Disposal, this should still be described in Chapter 12, but it should be listed as a “special function”.

The CSS functions of Human Resources Support, Financial Management Operations, Religious Support, Legal Support, and Band Support should instead be called “administrative functions”. They are still very important to conducting successful operations, but FM 3-0 should describe them in their own chapter entitled “Administrative Support”.

The author is not recommending that the Ordnance, Quartermaster, Transportation, and Medical Service Corps branches go away, or that the installations where these branches reside close down. Likewise, the branch chiefs (i.e. Chief of Ordnance, Chief of Quartermaster, etc.)

would remain, except these positions would now be filled by generals who were Combat Logisticians. An appropriate selection process would occur to place the right General Officer with the right experience in the right branch chief position.

The branches still need to exist for managing the enlisted and warrant officer specialties. They would continue their proud traditions of maintaining, sustaining, moving, and supporting the force in any type of environment, through any type of conflict. The only difference is that the commissioned officers leading the organizations within the branches would truly be multifunctional logisticians who are better prepared to lead, plan, and execute CSS operations.

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